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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,015	02/03/2004	PEI-MING SHAN	12190-US-PA	2014

31561 7590 04/04/2007
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER

DESIR, JEAN WICEL

ART UNIT	PAPER NUMBER
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2622

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/708,015	Applicant(s) SHAN ET AL.	
	Examiner Jean W. Désir	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/15/07, Amendment (Reconsideration).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 6 is/are rejected.
- 7) ☒ Claim(s) 3-5 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langan et al (US 6,766,064) in view of Ferguson (US 6,907,143).

Claim 1:

Langan discloses:

“a spatial domain infinite impulse response filter, for receiving an input signal for generating a spatial domain infinite impulse response filtering value”, see Fig. 10 item 100, col. 13 lines 14-27;

“a peak value detector, coupled to the spatial domain infinite impulse response filter, for generating a peak value during a predetermined recording interval corresponding to the spatial domain infinite impulse response filtering value”, see Fig. 10 item 108, col. 13 lines 26-27 ;

“and a contrast evaluator, coupled to the peak value detector, for evaluating the contrast value according to the peak value and a predetermined threshold”, see Fig. 10 items 102-106;

Application/Control Number: 10/708,015
Art Unit: 2622

Page 3

the difference between the claimed invention and Langan's disclosure is that Langan does not explicitly say that item 100 of Fig. 10 is an "infinite impulse response filter" as claimed. However, Langan does teach that item 100 can act as a low pass filter (see col. 13 lines 23-25, col. 7 lines 4-5); and low pass filter that is based on infinite impulse response (IIR) filter is a notoriously well known device in the art, as evidence see Ferguson at col. 2 line 39, used to achieve a given filter response characteristic with less memory and/or calculation; because of these teachings an artisan would be motivated to modify Langan's disclosure and implement IIR filter to arrive at the claimed invention; this implementation would advantageously maximize image contrast and use less memory and/or calculation. Therefore, the claimed invention would have been obvious to a person of ordinary skill in the art at the time the invention was made.

Claim 2:

a first multiplier (see *Ferguson at Fig. 2 item 34*), for multiplying the input signal with a first factor value for generating a first output value;

an adder (see *Ferguson at Fig. 2 item 36*), coupled to the first multiplier for generating a sum of the first output value and a second output value to be the spatial domain infinite impulse response filtering value;

and a second multiplier (see *Ferguson at Fig. 2 items 38, 40*), adapted to multiply the spatial domain infinite impulse response filtering value with a second factor value for generating the second output value, wherein a sum of the first factor value and the second factor value is 1 (see *Ferguson at Fig. 2 where $b_0 + a_1$ is 1 as claimed*).

Claim 6 is rejected for the same reasons as claim 1.

Page 4

Response to Arguments

3. Applicant's arguments have been fully considered:

A) Applicants argue on pages 2-3 of the REMARKS that “Langan is silent about “evaluating the contrast value according to the peak value and a predetermined threshold””. These arguments are not persuasive, because Applicants agree that Langan generates a peak value through a peak value detector item 108 of Fig. 10 as pointed out in the rejection; and the circuit formed by items 102-106 of Fig. 10 which has been considered as the contrast evaluator, as claimed, is clearly coupled to **the peak value detector** (108) and **a predetermined threshold** provided by item 101 or 100 of Fig. 10; therefore, the claimed invention which is directed to “a contrast evaluator, coupled to the peak value detector, for evaluating the contrast value **according to** the peak value and a predetermined threshold” is clearly disclosed by Langan as claimed and as pointed out in the rejection. And hence, Langan is not silent about “evaluating the contrast value according to the peak value and a predetermined threshold”.

B) The Applicants' arguments on pages 4-5 regarding claims 3 and 7 are persuasive; hence, the rejection of claims 3 and 7 is withdrawn.

Allowable Subject Matter

4. Claims 3, 4, 5, and 7, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Application/Control Number: 10/708,015
Art Unit: 2622

Page 5

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean W. Désir whose telephone number is (571) 272 7344. The examiner can normally be reached on 5/4/9 - First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272 7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2622

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD

Mar. 29, 07

A handwritten signature in black ink, appearing to read 'David Ometz', with a long horizontal stroke extending to the right.

DAVID OMETZ
SUPERVISORY PATENT EXAMINER